STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

September 20, 2005

Certified Mail No. 7005 0390 0003 2967 8670

Gordon Sargent
Regulatory & Compliance Manager
Seedbiotics – Becker Underwood, Inc.
801 Dayton Avenue
Ames, IA 50010

RE: Facility ID No. 027-00088, Seedbiotics, Caldwell, Idaho
Final Permit Letter

Dear Mr. Sargent:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) Number P-050018 for the Seedbiotics facility in Caldwell, Idaho, in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on April 4, 2005. This permit is effective immediately. This permit does not release the facility from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Boise regional office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Bruce Loucks for

Martin Bauer, Administrator
Air Quality Division

MB/CM/sd
Enclosures

Permit No. P-050018

Air Quality
PERMIT TO CONSTRUCT

State of Idaho
Department of Environmental Quality

PERMIT No.: P-050018
FACILITY ID No.: 027-00088
AQCR: 64 **CLASS:** B
SIC: 0723 **ZONE:** 11
UTM COORDINATE (km): 524.0, 4834.0

1. **PERMITTEE**
Seedbiotics

2. **PROJECT**
Permit to Construct Modification

3. **MAILING ADDRESS**	**CITY**	**STATE**	**ZIP**
818 Paynter Avenue	Caldwell	ID	83605
4. **FACILITY CONTACT** Gordon Sargent	**TITLE** Regulatory & Compliance Mngr.	**TELEPHONE** 515-956-2371	
5. **RESPONSIBLE OFFICIAL** Jeff Becker	**TITLE** Board Member	**TELEPHONE** 515-232-5907	
6. **EXACT PLANT LOCATION** 818 Paynter Avenue, Caldwell, Idaho		**COUNTY** Canyon	

7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**
Seed treatment

8. **GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.

TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: September 20, 2005

Table of Contents

Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
m	meter(s)
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
SIC	Standard Industrial Classification
SM	synthetic minor
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PERMIT TO CONSTRUCT SCOPE

Purpose

1.1 This PTC is a modification of the facility's initial Permit to Construct. Changes reflected in this permit modification are:

- The limestone silo for Line 1 will no longer use a bin vent filter for particulate control, but will use the Torit dust collector
- The limestone silo for Line 2 will no longer use a bin vent filter for particulate control, but will use the Line 2 baghouse No. 2 (Baghouse 2-2)
- Increased product hourly and yearly throughput.
- Increased operating hours.

1.2 This PTC replaces PTC No. P-020048, issued October 7, 2003, the terms and conditions of which shall no longer apply.

Regulated Sources

Table 1.1 lists all sources of regulated emissions sources in this PTC.

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description		Emissions Controls
2, 3	Line 1	limestone silo	Dust collector Torit Division Model TJ1080-155 Stack height = 20 feet; stack diameter = 16 inches 95% efficient for PM
3		mixer (Centricoater)	
3		drying deck	Baghouse 1-1 Cantech Enviro Systems, Inc. Model 195HP1415TRH Stack height = 30 feet; stack diameter = 29 inches 99.9% efficient for PM
3		cooling deck	Baghouse 1-2 Cantech Enviro Systems, Inc. Model 195HP1415TRH Stack height = 30 feet; stack diameter = 29 inches 99.9% efficient for PM
3	Line 2	mixer	Baghouse 2-1 Cantech Enviro Systems, Inc. Model 195HP1415TRH Stack height = 30 feet stack dimensions = 25 inches x 23 inches 99.9% efficient for PM Baghouse 2-2 Cantech Enviro Systems, Inc. Model 195HP1415TRH Stack height = 30 feet stack dimensions = 25 inches x 23 inches 99.9% efficient for PM
3		drying deck	
3		cooling deck	
2, 3		limestone silo	Baghouse 2-2 Cantech Enviro Systems, Inc. Model 195HP1415TRH Stack height = 30 feet stack dimensions = 25 inches x 23 inches 99.9% efficient for PM

2. LINE 1 AND LINE 2 LIMESTONE STORAGE SILOS

2.1 Process Description

The Line 1 and Line 2 limestone storage silos store limestone needed for seed coating. Limestone is pneumatically transferred from a delivery truck to each silo. PM emissions are generated during silo filling. PM emissions controls are shown in Table 2.1.

2.2 Emissions Unit Descriptions

Table 2.1 LIMESTONE STORAGE SILOS DESCRIPTIONS

Emissions Units	Emissions Control Device	Emissions Point
Line 1 limestone silo	Torit dust collector	Torit dust collector stack
Line 2 limestone silo	Baghouse 2-2	Baghouse 2-2 stack

Emissions Limits

2.3 Emissions Limits

The limestone storage silos share emission control devices with product Line 1 and product Line 2. Emissions limits for the control devices are listed in Section 3.

2.4 Opacity Limit

Emissions from the emissions control stacks, or any other stack, vent, or functionally equivalent opening associated with the limestone storage silos, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

2.5 Throughput Limits

Line 1 Limestone Storage Silo

The maximum annual loading rate shall not exceed 18,250 tons per year.

Line 2 Limestone Storage Silo

The maximum annual loading rate shall not exceed 18,250 tons per year.

Monitoring and Recordkeeping Requirements

2.6 Throughput Monitoring

The permittee shall monitor and record the limestone throughput for the Line 1 and the Line 2 limestone storage silos monthly and annually to demonstrate compliance with Permit Condition 2.5. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period. Records of this information shall remain onsite for the most recent two-year period and shall be made available to DEQ representatives upon request.

3. PRODUCT LINE 1 AND PRODUCT LINE 2

3.1 Process Description

Raw seeds, a fungicide, adhesive polymers, water, dies/colorants, peat inoculant, and limestone are combined in mix tanks to treat the seeds. Treated seeds are then transferred to the drying deck to remove moisture. Dried seeds are transferred to a cooling deck, and then bagged for storage/shipping.

3.2 Emissions Control Description

Line 1:

- The Torit dust collector controls emissions from both the limestone storage silo and the mixer.
- Baghouses 1-1 and 1-2 are connected in parallel, and control emissions from both the drying deck as well as the cooling deck. However, the majority of drying deck emissions are captured by Baghouse 1-1, and the majority of cooling deck emissions are captured by Baghouse 1-2.

Line 2:

- Baghouses 2-1 and 2-2 are connected in parallel, and control emissions from all the emission units. However, Baghouse 2-1 collects the majority of mixing and drying emissions, and Baghouse 2-2 collects the majority of cooling deck emissions. The limestone storage silo emissions are routed directly to Baghouse 2-2.

Table 3.1 PRODUCT LINES I AND 2 EMISSIONS CONTROLS

Emissions Units / Processes		Emissions Control Device	Emissions Point
Line 1	Limestone storage silo[1]	Torit dust collector	Torit dust collector stack
	"Centricoater" seed mixer		
	Drying deck	Baghouse 1-1 and Baghouse 1-2	Baghouse 1-1 and Baghouse 1-2 stacks
	Cooling deck		
Line 2	Seed mixer	Baghouse 2-1 and Baghouse 2-2	Baghouse 2-1 and Baghouse 2-2 stacks
	Drying deck		
	Cooling deck		
	Limestone storage silo[1]	Baghouse 2-2	Baghouse 2-2 stack

[1]Limestone storage silos are discussed in permit section 2.

Emissions Limits

3.3 Emissions Limits

The PM and PM_{10} emissions from the Line 1 and Line 2 emission control device stacks shall not exceed any corresponding emissions rate limits listed in Table 3.2. Note that the baghouses, which are connected in parallel, are assigned a cumulative emission limit.

Table 3.2 PRODUCT LINES 1 AND 2 EMISSIONS LIMITS

Source Description		PM_{10} lb/hr	PM_{10} T/yr
Line 1	Torit dust collector stack		
	without silo filling	0.03	0.1
	during silo filling	1.15	0.4
	Baghouse 1-1 plus Baghouse 1-2	0.75	3.3
Line 2	Baghouse 2-1 plus Baghouse 2-2		
	without silo filling	0.74	3.3
	during silo filling	0.76	3.3

3.4 Opacity Limit

Emissions from the emission control device stacks, or any other stack, vent, or functionally equivalent opening associated with the product lines, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

3.5 Throughput Limits

Line 1

- Product throughput is limited to six tons per hour and 52,560 tons per year

Line 2:

- Product throughput is limited to six tons per hour and 52,560 tons per year

3.6 Pressure Drop Monitoring Devices

The permittee shall calibrate, operate, and maintain a device to continuously measure the pressure drop across the Torit dust collector, Baghouses 1-1, 1-2, 2-1, and 2-2.

3.7 Pressure Drop

The pressure drop across the Torit dust collector and Baghouses 1-1, 1-2, 2-1, and 2-2 shall be maintained within manufacturer and O&M manual specifications. Documentation of the operating pressure drop specification for the Torit dust collector and each baghouse shall remain onsite at all times and shall be made available to DEQ representatives upon request.

3.8 Baghouse 2-1 Stack Height

The Baghouse 2-1 stack shall be a minimum height of 30 feet with a diameter of 28.0 inches. The stack shall be vertical with no obstructions.

3.9 Torit Dust Collector Filters and Baghouse Bags

The Torit dust collector filters, or equivalent, shall have a minimum control efficiency of 95% for PM_{10}. The Baghouses shall have bags with a minimum control efficiency of 99.9% for PM_{10}.

Monitoring and Recordkeeping Requirements

3.10 Visible Emissions Monitoring

The permittee shall observe the visible emissions from the Torit dust collector stack and each baghouse stack once per month when the associated process lines are operating, silos are filling, or a combination of production line operations plus silo filling. The visible emissions observations shall consist of a see/no see evaluation of each stack. If any visible emissions are present, the permittee shall either take appropriate corrective action as expeditiously a practicable, or perform a Method 9 opacity test in accordance with the test methods and procedure contained in IDAPA 58.01.01.625. The permittee shall maintain records of each visible emissions observation and each opacity test when conducted. The records shall include, at a minimum, the date and results of each observation and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

3.11 Throughput Monitoring

The permittee shall monitor and record the production for Line 1 and Line 2 monthly and annually to demonstrate compliance with Permit Condition 3.5. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period. Records of this information shall remain onsite for the most recent two-year period and shall be made available to DEQ representatives upon request.

3.12 Pressure Drop Monitoring

The permittee shall monitor and record the pressure drop across the Torit dust collector and each baghouse once per week when the associated process lines are operating, silos are being filled, or a combination of production line operations plus silo filling. The pressure drop records shall remain onsite for the most recent two year period and shall be made available to DEQ representatives upon request.

3.13 Operation and Maintenance Manual Requirements

The permittee shall have O&M manuals for the Torit dust collector and each baghouse which describe the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the air pollution control devices. This manual shall remain onsite at all times and shall be made available to DEQ representative upon request.

4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:

   - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
   - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.

4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.

5. The permittee shall notify DEQ, in writing, of the required information for the following events within 5 working days after occurrence:

   - Initiation of Construction - Date
   - Completion/Cessation of Construction - Date
   - Actual Production Startup - Date
   - Initial Date of Achieving Maximum Production Rate - Production Rate and Date

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.